PDR RID Report

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Section **Page** **Figure Table**

Category Name Design-ISS **Actionee** HAIS

Sub Category

Subject 1999 Bandwidth Estimate

Description of Problem or Suggestion:

It seems unreasonable that kilobit/sec instruments really require such a large output from the GSFC DAAC. Can't the GSFC DAAC produce a "low resolution" MODIS product that would reduce the required bandwidth by an order of magnitude or more.

Originator's Recommendation

Rejustify the large bandwidths between GSFC and LaRC.

GSFC Response by: **GSFC Response Date**

HAIS Response by: Forman **HAIS Schedule** 2/28/95

HAIS R. E. **HAIS Response Date** 4/4/95

ECS Project" is based on flows needed to support transfer of MODIS and VIRS products as inputs for CERES processing. Additionally, CERES reprocessing (estimated at 3 times the processing rate) is also included in the data flow between GSFC and LARC DAAC. MODIS products are also required to support processing and reprocessing of the MISR and MOPITT data at LaRC. (We should note that MISR, in particular, is a high data rate instrument.) Finally, these "raw average flows" are converted into peak flows via a cumulative multiplier of 2.5 to account for protocol overhead, network scheduling contingency and circuit utilization factors in order to size the inter-DAAC Wide Area Network circuits appropriately..
Additional analysis is required to evaluate options for reducing the inter-DAAC flows. For example the GSFC to LaRC flow can be significantly reduced if the MODIS L1B data is subsetted to match the much narrower MISR swath. Similarly, subsetting the MODIS L1B data to select the particular spectral bands required by CERES and MISR can reduce the required bandwidth. However, such subsetting can in some cases, effect the science value of the subsetted product and the product has to be acceptable to the science community. As a consequence ECS cannot unilaterally decide on subsetting without input from the science community. ECS can only transport the science products at the resolution provided by the science teams.

Status **Closed** **Date Closed** **5/24/95** **Sponsor** **desJardins**

****** **Attachment if any** ******
